



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,263	12/10/2001	Nabil M. Lawandy	109960.223US2	4505
23483	7590	09/24/2004	EXAMINER	
WILMER CUTLER PICKERING HALE AND DORR LLP 60 STATE STREET BOSTON, MA 02109			ANGEBRANNDT, MARTIN J	
			ART UNIT	PAPER NUMBER
			1756	

DATE MAILED: 09/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/016,263

Applicant(s)

LAWANDY ET AL.

Examiner

Martin J Angebranndt

Art Unit

1756

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 4-7, 14-17, 23 and 24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 4-7, 14-17, 23 and 24 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

1. The response of the applicant has been read and given careful consideration. Responses to the arguments of the applicant are provided after the first rejection to which they are directed. The attorney's signature block recites an incorrect agent number.

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 4-6, 14-16 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/67085 A (LAWANDY et al.)

WO 99/67085 A (LAWANDY et al.) teaches in embodiment 4, a layer for rendering an optical recording medium unreadable over time. The medium is a polymeric layer containing silica gel (an absorbent/scavenger material) and benzyl alcohol. After time the polymeric layer becomes crazed and cloudy. (page 28/line 34-29/6). The use of two or more layers based upon evaporation is disclosed. (29/8-34). Example 3 tests the process by sealing the material in a ziplock bag. (28/4-31). The use of sublimation of acid or base producing materials or from a solution entrained in a polymeric layer is disclosed. The use of gasses dissolved in water, which change in pH due to the evolution and evaporation of the gas is disclosed. This is also disclosed as being used to detect various compounds, including amines and carbon dioxide. (30/4-32).

With respect to figures 6, the reference teaches the use of a diffusion barrier together with a layer, which contains oxygen and a photoinitiator/photosensitizer, which generates singlet oxygen upon irradiation. (20/11-22/15) The use of two different solvents having different polarity and volatility together with colorless dyes and a polar polymer is disclosed. The

polyhydroxystyrene polymer is disclosed as able to cause coloration as well and the mixture remains colorless until the solvent is removed. (25/27-27/11). The use of various solvents is disclosed, including NMP (27/2), acetone (21/32), methanol (21/30) and other solvents.

It would have been obvious to one skilled in the art to modify the process of example 4 by providing the layer on an optical recording medium as it is disclosed as this is the disclosed purpose and sealing the result in a ziplock bag to test the shelf-life/stability of the resultant protected medium in a manner similar to that used in example 3 as testing is disclosed as desirable. Further, it would have been obvious to use solvents disclosed, such as NMP, acetone or methanol in place of the benzyl alcohol with a reasonable expectation of achieving comparable results. The silica is considered to be a diffusion barrier material for the solvent within the meaning of the claims set forth on pages 8-9 with respect to figure 12, which details that the "diffusion barrier can be a layer or substance that is presently part of the disk, thus requiring no additional layers or added materials". The embodiment where multiple layers are present discussed on page 29 of the reference is considered to address the embodiments of claim 10.

In response to the arguments of the applicant, the case of example 4, the silica is the getter [see 0030], the polymer is the read inhibiting agent due to the change in the refractive index it undergoes when the solvent is entirely evaporated (causing scattering/cloudiness due to the refractive index mismatch which the silica gel) and the benzyl alcohol is chemical compound which inhibits the change and is adsorbed into the silica gel. Clearly the evaporation does not require reading and therefore the argument is unpersuasive. The examiner adopts the position that the ziplock bag imperfectly seals the medium and therefore the obvious process described

Art Unit: 1756

above inherently meets the claim limitations. The examiner notes that the instant specification at [0030] specifically describes "placed in a bag containing the disk". The rejection stands.

4. Claims 4-6, 14-16 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 99/67085 A (LAWANDY et al.) in further view of US 5,183,763 B (MALLOW et al.).

US 5,183,763 B (MALLOW et al.) teach the use of silica together with leuco dyes, where the presence the pH of the composition changes. (4/1-12). The use of various solvents is disclosed. (4/10-27). The use of nitric acid in the compositions is disclosed in the examples.

In addition to the above, it would have been obvious to one skilled in the art to modify the invention of WO 99/67085 A (LAWANDY et al.) which uses the leuco dyes dispersed in a polar binder together with mixed solvents by adding the silica to control the amount of solvent and its evaporation as in example 4 with a reasonable expectation of achieving the desired result based upon the direction within US 5,183,763 B (MALLOW et al.) evidencing the use of silica together with leuco dyes in color evolving gas detection systems

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). The relevance is with respect to the functionality of leuco dyes in registering pH based changes and the ability of silica to act as an absorbant/getter. The references is congruent with the teachings of leuco dyes and silica by WO 99/67085 A (LAWANDY et al.) and the acid base coloration of leuco dyes is clearly known in the optical recording art as evidenced by US 4,800,193 A (Saeki et al.).

5. Claims 4-7,14-17 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable

over WO 99/67085 A (LAWANDY et al.) in view of US 5,183,763 B (MALLOW et al.) and US 4,800,193 A (Saeki et al.).

US 4,800,193 A (Saeki et al.) teaches the use of nitric, hydrochloric or other inorganic acids or metal halides as developers to cause coloration of leuco dyes. (7/12-17).

In addition to the basis provided above, it would have been obvious to obvious to modify the combination of WO 99/67085 A (LAWANDY et al.) and US 5,183,763 B (MALLOW et al.) by using hydrochloric acid, rather than nitric acid based upon the disclosure of equivalence of these acids in leuco dyes based color evolving systems.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

6. Claims 4-6, 14-16 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawandy et al. '262.

Lawandy et al. '262 teaches with respect to figure 16, a color blocking agent (CBA) which which may be placed on a patch or swab of a fibrous or porous material or a CBA absorbing material, such as a polymer. The use of a porous membrane is disclosed. The opening of the packaging depletes the CBA (16/38-/17/27). The use of various solvents, including NMP (10/17) ethanol (10/41) and other volatile solvents is disclosed.

It would have been obvious to one skilled in the art to modify the invention of figure 16 by using a CBA absorbing material based upon the disclosure to do so.

The applicant did not address this rejection specifically.

7. Claims 4-6, 14-16 and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawandy et al. '892.

Lawandy et al. '262 teaches with respect to figure 6, a color blocking agent (CBA) which which may be placed on a patch or swab of a fibrous or porous material or a CBA absorbing material, such as a polymer. The use of a porous membrane is disclosed. The opening of the packaging depletes the CBA (6/20-52). The use of various solvents, including NMP, ethanol and other volatile solvents is disclosed.

It would have been obvious to one skilled in the art to modify the invention of figure 6 by using a CBA absorbing material based upon the disclosure to do so.

The applicant's arguments fail to account for the disclosure and claiming of the use of these techniques for verifying the integrity of optical recording media as is evident from claim 34.

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 4-6, 14-16 and 23-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 18-28 and 34-36 of U.S. Patent No. 6,489,892. Although the conflicting claims are not identical, they are not patentably

distinct from each other because they seek coverage for the same embodiments. See section [0024] of instant application and compare with claims 23 and 34 of the patent.

See the response provided above.

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Cornet '773 describes the provision of a getter adjacent the recording layer to prevent oxidation of the recording layer. (5/15-26)

11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Martin J Angebrannt whose telephone number is 571-272-1378. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

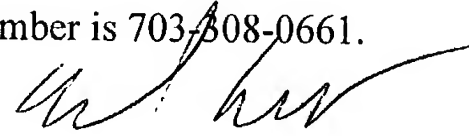
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Huff can be reached on 571-272-1385. The fax phone numbers for the

Application/Control Number: 10/016,263
Art Unit: 1756

Page 8

organization where this application or proceeding is assigned are 703-872-9309 for regular communications and 703-872-9309 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-808-0661.



Martin J Angebranndt
Primary Examiner
Art Unit 1756

September 20, 2004